

THE REALLY GREAT SAM 8 SPEAKS

SOCIETY OF ANTIQUE MODELERS



**FLYING
ACES**
Eagle Squadron 34

LONG TIME FLYERS CLUB NEWS

On the web at <http://www.sam8.org>

VOLUME 402 ISSUE 2

Early New Year 2021

Roster of the old dawgs....

STEVE DONA.....'THE PREZ'

WILL TILSE.....VICE PRESIDENT

DAVE CASSELL.....SECRETARY-TREASURER

DAVE GARDNER.....SCRIBE OF THIS RAG....

Notice: Next Meeting: Second Thursday of the Month, whatever year!

Rainbow Café, 112 E. Main St., Auburn, WA, 10:30 am-1 pm..(or thereabouts.)

President's message

Happy new year SAM 8 members!

There is lots going on so let's get too it!

First and foremost let's talk about the Covid Vaccine . Most of the SAM 8 membership now qualifies to get the vaccine and I hope that you are all working to schedule your shots ASAP. This is turn will make getting together a lot easier and safer for all of us. My daughter who works in the medical industry and my wife who is a volunteer fire fighter (Yep! She's a bad ass!) have both gotten their two doses of the vaccine. They both have felt an enormous sigh of relief as they are now much less susceptible to getting the virus and less prone to passing it on to anyone else.

I got a lot of push back with trying to schedule a get together at 60 acres since our state was in the middle of a huge spike and most of our membership IS in the high-risk group for contracting the disease. We also ran out of Pinna flyers so we have now ordered 20 more kits to be sure that everyone can have one to fly.

I am planning to schedule a fun fly/ meeting at 60 acres on Saturday February 20th at 10:00 am. We will have to watch the weather as the day gets close but for those who need a deadline, here it is!

The Pinna Flyer kit is still only \$10.00 to club members. Come and get em! I will have some at my office, Dave Higgins has some and Gerry Morrissey will have a few as well so give us a call and get your model.

At this upcoming fun fly at 60 acres, we need to discuss scheduling a contest in March and May at Nick's field. The March contest will be a late "Misery Meet" followed by our spring opener in May. We also have a bunch of engines and rubber to sell generously donated by our own Ed Lamb.

Last Saturday, I had David Higgins and Gerry Morrissey over to my shop to do some modeling and the like. Dave had just picked up the Pinna Flyer kits from Dave Cassell and he needed to package them up for the membership. I didn't realize the lengths that Dave goes to just packaging up these models. He even makes a CUSTOM plastic bag for them. Next time you see him, be sure to thank Dave for all of the work he does for the club. It took him nearly 2 hours to pack up all the kits. This saves the club members a lot of money while offering a superior product in the process.

So, back to our story, Gerry Morrissey had come over to run the ETA .15 that he had borrowed from me for his Cranfield WC model the #18. Seems I had offered him a worn-out motor and we had to send it back to England to have a new piston and contra piston fitted. We had to mix a custom "break in" batch of diesel fuel as well and was a real eye opener for both Gerry and Dave to see how it's all done. After filling my shop with the wonder fragrance of either we all seemed to be in a better mood about things! (hmmmm...) It was drizzling rain outside so we had to set up a canopy to provide some shelter for our engine running. Not an easy proposition these days as my ski boat and utility trailer are in the way but we were able to fit the canopy over them both and still had a nice little space to set up the engine test stand. I expected that the contra piston would be set up already since the motor had been tested by Michael Crisp after he made the new parts and reassembled the motor. While the mighty ETA ran great on a prime, we couldn't get the darn thing to run at all for anything more than a few pops and bursts. After ½ hour of flogging with no success I swallowed my pride and called Bill Swift on the phone. He lives down in Roseburg Oregon and he sat on speaker phone while we tried a little of this and a bit of that. Seems the contra piston needs to be adjusted EVERY TIME since the temperature, humidity and atmospheric pressure is different too. After I realized that, we were able to get the motor started up easily. We ran 8 tanks through it and all decided that we had probably bothered all of my neighbors enough. It was getting pretty cold too, so it was a great time to call it a day and clean up. By this time, we had all taken a turn at getting it started. Even Dave Higgins our resident indoor and rubber flyer took 2 turns at starting the mighty ETA. Lots of fun, 3 grown men dancing around a toy engine smiling and giggling. Gerry was all smiles as he knows that this lovely motor is going to be campaigned on his Cranfield model this season. Should be the model to watch!

On another note, Facebook has suddenly blown up with lots of pictures of new models! Nice to see something other than politics on that venue. With the stay at home orders and other restrictions from Covid, seems that many of you are holed up in your shops and building like crazy! I see new models from Mark Sexton, Bob DeShields, Bruce Hanna, Bob Stalick, John Buskell and Nigel Tarven! (Just naming the local guys) Will Tilse is finishing up a new Brooklyn Dodger and your President is recovering and rebuilding his vintage Hydro Star.

I expect that the Covid restrictions will be gone by next August which will allow the Canadian guys to travel over the border and play with us too. WMC is planning to run the Cranfield event in Vintage FAI again this year to allow everyone who build a model to fly it this season. SAM 8 will hold a "3-Rounder" Vintage FAI event again as well during our Spring Opener contest.

So come get your Pinna flyer and get it put together for our upcoming fun fly/ meeting at 60 acres. While you are at it, make sure to send Dave Cassell your club dues for the year.

See you all at 60 acres!

Steve Dona, The Prez

SAM 8 Minutes(continued after the next meeting!..BUT...an important announcement!

DOOZ ARE DUE...!!

You've all probably had a reminder from David Cassell that it's time for this years' dues (the glue which holds the club together, even if you prefer Ambroid!)

As David noted on 12/20, he has set up a PayPal account to simplify the process.

Remember, it's \$15 for one year or \$25 for two. David's PayPal account is his email, whippet@earthlink.net He has another option, ZELLE (check with him on this) or the old standby, a check in the mail.

2020 Old Time, Free Flight, Control Line and Club Modeling Event Schedule

Date	Event / Time / Location	Activity/Location	Contact
See Below	TBD		SAM8

For additional Northwest FF and CL activity, see the following websites for more detail.

For SAM 8 activities, look on the SAM 8 Website, <http://www.SAM8.org>

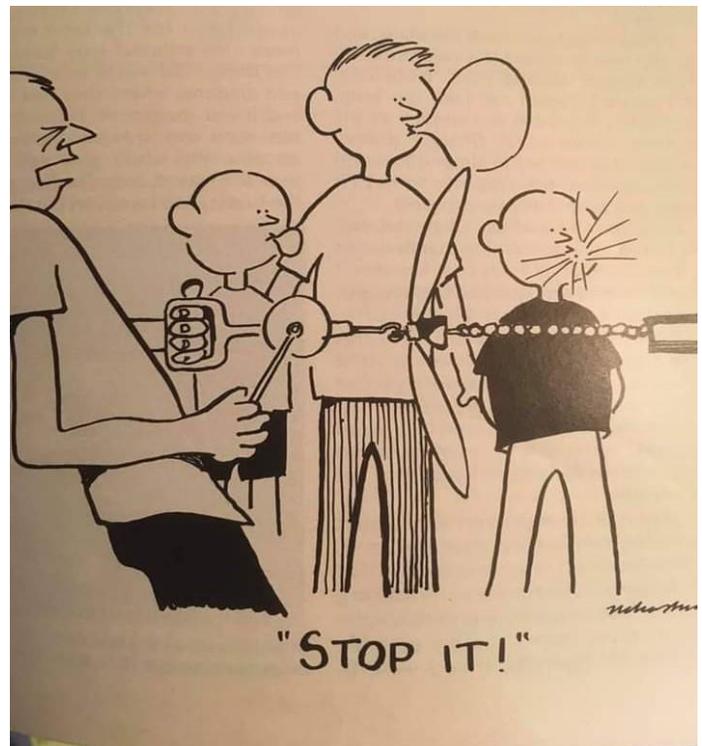
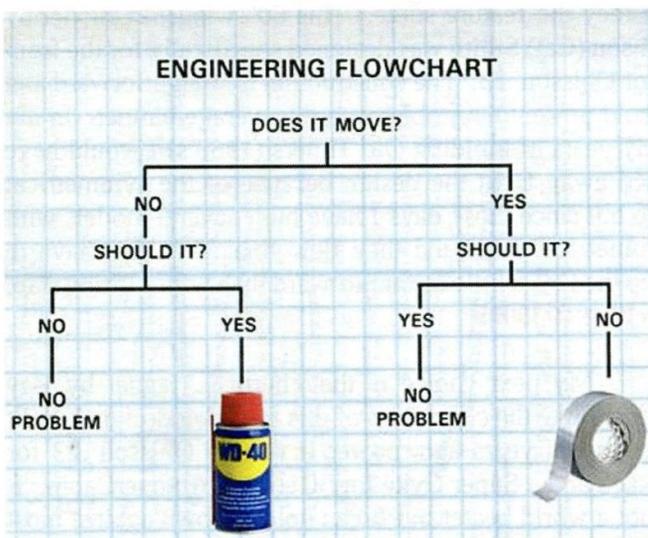
For SAM National activities, look on the SAM Website, <http://www.antiquemodeler.org/>

For WMC activities, check on their website, WillametteModelersclub.weebly.com, or contact Bob Stalick at freeflyter@aol.com.

For NW Skyraiders' activities, check on <http://flyinglines.org>, or davegardner55@msn.com.

Really Great SAM 8 meets every second Thursday each month the Rainbow Café in Auburn at 11:30 AM. Come join us for lunch! (WHEN AVAILABLE..!!)

Meanwhile, some engineering fundamentals.....



...and ultimate strength testing....

...and some Balsa Bitz...and realities of price and availability...

from The Economist.....esoteric reading at its best...!! ...and more than you ever want to know!

A worrying windfall:

The wind-power boom set off a scramble for balsa wood in Ecuador

It has had unintended consequences

Jan 30th 2021

EWEGONO, ECUADOR



IN LATE 2019 loggers started arriving in Ewegono, a village of nine indigenous Waorani families on the Curaray river in the Ecuadorean Amazon. They were looking for balsa, a fast-growing species of tree whose wood is used in blades for wind-power turbines. There was a global shortage. At first, villagers "grabbed chainsaws, axes and machetes to cut it down", says Saúl Nihua, Ewegono's leader. The pay could be \$150 a day, a fortune in a region where most people have no jobs.

Soon the harvest became a free-for-all. Some loggers got permits with the help of the Waorani, but others forged them and invaded the indigenous reserve. Many took truckloads of wood without paying their workers. People from less remote places cut all the balsa they could find, stacking it along the road to Arajuno, the nearest town, says Mr Nihua. Buyers in trucks paid as little as \$1.50 per tree. Uncontrolled logging degraded the forest. "They've killed off vegetation tremendously...without respecting legal limits," says Mr Nihua, who partly blames himself. He encouraged his fellow Waorani to earn money from the coveted timber. The influx of cash and liquor fuelled family violence.

The origin of the crisis lies oceans away, in growing demand for wind power from the world's largest economies. Thanks to ambitious targets to reduce the use of fossil fuels and technology that is bringing down turbine prices, global wind-power capacity has been increasing by 9% a year over the past decade. In 2020 new installed capacity surged by 24% to a record 78GW. Wind farms in China and the United States, which made up 60% of that demand, were rushing to install them before tax credits and subsidies expired. "It was like the end of a gold rush," says a Chinese representative of a Western turbine maker.

Unlike gold, wind turbines benefit the whole world, not just their owners. They are an indispensable technology for phasing out fossil fuels. But "the sudden surge in demand put enormous strain on the entire wind-industry supply chain," says Shashi Barla of Wood Mackenzie, a consultancy. Wind fever caused the biggest problems in Ecuador, which provides more than 75% of the world's balsa.

A stiff, light wood that is also used in model airplanes and real aircraft, balsa goes into the core of a blade, where it is sandwiched between two fiberglass "skins" to add strength.

Windmills built in the 1980s had 15-metre (49-foot) blades and could generate 0.05MW of electricity. Now, an offshore wind turbine with blades more than 100 metres long generates up to 14MW. Bigger blades require more balsa. Engineers at the National Renewable Energy Laboratory in the United States have calculated that a 100-metre blade requires 150 cubic metres (5,300 cubic feet) of balsa wood, or several tons.

Balsa trees reach optimal density in just five to seven years, which has helped suppliers cope with rising demand. Leading turbine manufacturers like Vestas in Denmark and Siemens Gamesa, in Spain, get most of their wood (along with foam, a less popular substitute) from three core-materials suppliers. 3A Composites, a Swiss firm, has more than 10,000 hectares (25,000 acres) of balsa plantations in Ecuador's coastal lowlands. Gurit (also Swiss) and Diab (Swedish) depend on independent suppliers and farmers growing balsa along with other crops, to whom they give seeds and training.

It is harder to predict demand for balsa than for, say, Christmas trees. As a result, says Ray Lewis of Diab, "there has always been a bit of a balsa crisis." Rising demand in the mid-2000s led to new plantations. But in 2011 turbine installations slowed sharply due in part to tighter regulations and a slower economy in China. Balsa prices plummeted. Growers planted less of it in Ecuador.

The most recent crisis was different. Demand, which revived in 2018, outstripped the supply of plantation-grown balsa by a lot, not a little. The price doubled from mid-2019 to mid-2020. In 2019 Ecuador exported \$219m-worth of balsa wood, 30% more than the previous record in 2015 (see chart). In the first 11 months of 2020, it exported balsa worth \$784m. Diab sold balsa for \$1,800 per cubic metre in 2020, three times what it had in 2018.

Easterly wind

The main source of new demand was China, which has built more turbines than any other country. In 2006 it had just 2.6GW of installed capacity, compared with 21GW in Germany and 12GW in the United States. By 2019, when Germany had 61GW and the United States had 105GW, China had blown past both, to 236GW. At the end of last year China's president, Xi Jinping, announced plans to reach 1,200GW of wind and solar capacity by 2030.

Chinese turbine manufacturers such as Goldwind and Envision, founded in 1998 and 2007 respectively, now have nearly 30% of global market share. They have erected turbines in dozens of countries. At first they used the same handful of Western blademakers and core-material suppliers as their competitors, but before long Chinese firms had edged into all levels of the supply chain. Sino Composite bought a stake in Cobalsa, a long-established Ecuadorean balsa firm.

The rising price of balsa also lured middlemen "like bees to a honeypot", says Mr Lewis. A 40-year veteran of the wind industry, he got emails from companies he had never heard of offering to sell him truckloads of balsa. He ignored them. Chinese firms, though, were aggressive buyers. Some set up roadside sawmills. More than 75% of Ecuador's balsa exports in the first 11 months of 2020 ended up in China. Despite having one of its best years ever, Plantabal, 3A's Ecuadorean

subsidiary, saw its share of balsa exports drop from 20-25% to 8%, while Diab's fell from 15% to 5-6%.

The balsa boom, and the bust that has now followed, recall the rush to exploit rubber in the Amazon at the beginning of the 20th century. Rubber-tappers employed in slave-like conditions supplied industrializing Europe and the United States until production shifted to Asia, leaving them even more wretched. Indigenous Ecuadoreans have more protections, but are still vulnerable to exploitation. Like miners and oil-drillers before them, *balseros* "took advantage" of indigenous poverty and naivety, says Mr Nihua. The Waorani have been in contact with society only since the 1950s.

Often payment from loggers was partly in the form of liquor or marijuana; that encouraged drug abuse and violence, which were already big problems. Gilberto Nenquimo, the president of the Waorani Nation of Ecuador, says his brother-in-law was murdered with a chainsaw in a dispute over balsa.

Overlogging was another result. Balsa trees get less regulatory protection than older, rarer trees. Fast-growing "pioneer species" can be chopped down almost anywhere, including in the rainforest, using simplified "collection permits". Balsa taken illegally - without legitimate permits or from protected areas like Yasuní National Park, which is home to uncontacted tribes—can be "laundered" by mixing it with other wood, says a customs agent. At the height of the frenzy, loggers extracted trees too young to be suitable for blademaking or shipped balsa to China without drying it, which meant it rotted on the way. The environment ministry boasts it checked 1.4 million cubic metres of balsa in 2020, twice as much as in 2019, and confiscated four times that, but the total amount seized was less than 4,000 cubic meters.

Balsa is not an important store of carbon like bigger trees in the Amazon, but unregulated logging encourages traffic, hunting and extraction of species besides balsa. Denuded riverfronts raise the risk of flooding. The Global Forest Watch, an online platform that uses satellite data to track deforestation, recorded an "unusually high" number of "tree-cover loss alerts" in Ecuador in the second half of 2020, concentrated in the Amazon region. Land is Life, an NGO, says that balsa extraction is partly to blame.

After several assemblies, the Waorani decided in October to kick out the loggers. The Wampís, another indigenous group that lives on a 1.3m-hectare territory on the border of Ecuador and Peru, made the same decision. When their guests refused to leave, the tribe seized seven boatloads of wood. The loggers retaliated by holding 19 Wampís hostage at a river crossing on December 2nd. They were released later that day, after Peruvian authorities persuaded the tribe to hand over the wood.

To get to Ewegono from Puyo, you zigzag down a narrow road to Arajuno, past two large sawmills. (One, called Hessential, was built in 2018 by a Chinese businessman, corporate records show.) Then, from a tiny port on the Curaray river where all that remains of a logging camp are mounds of sawdust and rubbish, you board a *peke-peke*, a wooden canoe with a trolling motor. Loggers left Ewegono just before *The Economist* arrived in December, but signs of the balsa boom were still visible: a new social hall, a satellite dish and sawdust outlining a football pitch.

The bust had clearly begun. Piles of balsa were stacked messily near the river. The price of balsa had fallen by half because Chinese turbine companies halted their work until after Chinese new year in February. Villagers were collecting donations for a man who had burned himself in a drunken domestic dispute. On a scrubby river island stripped of most trees, locals were growing maize. "Three years ago, this was full of balsa," said Johnny Tocari, of NAWE. A few scrawny balsa stalks, identifiable by their heart-shaped leaves, had started to reclaim the banks.

Fresh blades

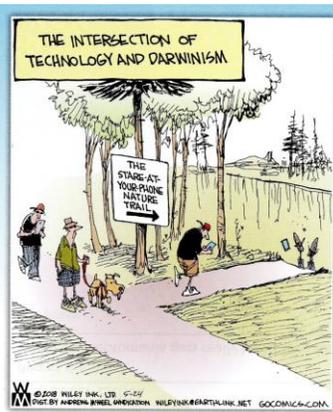
There is a chance that last year's balsa boom will be the last. The shortage accelerated a shift to blade cores made partly or completely of PET, a synthetic foam that is cheaper but was long considered inferior. After Vestas, the world's largest turbine-maker, introduced the first all-PET blade designs, others began to adopt them. In 2020, "all the CEOs had to do a second bill of materials" that excluded balsa, says Mr Lewis. "Now their success depends on their ability to switch."

Wood Mackenzie forecasts that the share of PET will increase from 20% in 2018 to more than 55% by 2023, with demand for balsa staying stable. Chinese blademakers will continue to use it in the short term, since they have yet to make PET price-competitive, says the China-based representative. Balsa's long-term future as a blade component depends in part on whether the problems Ecuador has experienced over the past couple of years can be solved.

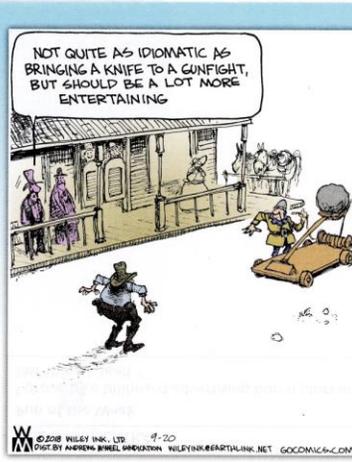
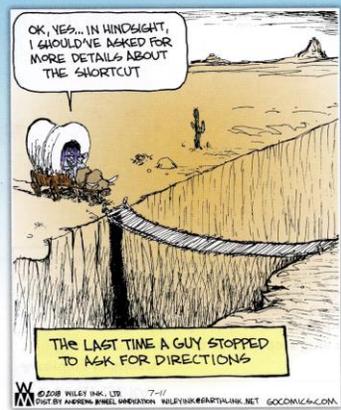
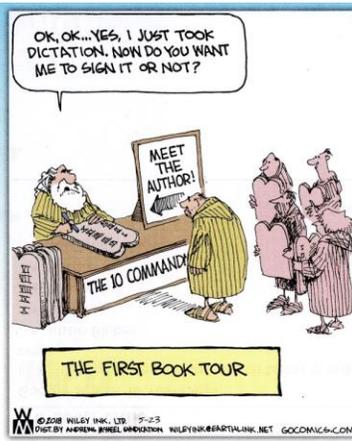
Ecuadorean officials and indigenous folk hope so. In November, after news reports about social and environmental damage from the balsa boom, the environment ministry excluded balsa from the list of the fast-growing species that can be logged with simplified permits. It is drafting stricter rules for how it can be harvested from forests.

The Waorani plan to start a co-operative to harvest balsa sustainably and sell it at fair prices to a lumber plant in Guayaquil. Similar initiatives are springing up across the region, some funded by NGOs like the Nature Conservancy, others by balsa exporters like Plantabal. They hope that consumers of green energy will care enough to insist on high social and environmental standards. "Would a person in Stockholm charging an electric car with energy generated from wood bought illegally in the Amazon feel right about that?" wonders Ramón del Pino, Plantabal's CEO. The answer is probably no. The question is whether drivers in Beijing will feel the same. ■

(The joys of 'renewable energy'-dg)



The 'HUMOR' section.....





*Openings for SAM 8 Officers.....2021.....????? A Great Deal for a new 'Arthur'
Yes, and even 'Arthur-itis' counts..!!!*

thhhhhat's all, Folks, for now
....and, in closing.....

**The Complaint Desk has closed. The Editor has left the building.
Don't forget to buy your souvenirs at the concession booth.**

Really Great SAM 8

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